27. (New) The method of claim 19 wherein the particles are stained before or after sedimentation.

REMARKS

Claims 1 through 10 and 19 through 27 remain pending in the application. Claims 1 and 7 are amended herein. Claims 11 through 18 are cancelled herein. New claims 19 through 27 are added herein. Reconsideration of the application is requested based on the following remarks.

Objections to the Specification:

The Specification was objected to for not including an Abstract. An Abstract accompanies this response on a separate sheet.

Trademarked names are capitalized wherever they occur.

The Specification has been amended to remove one of the references to U.S. Patent No. 5,580,717.

Withdrawal of the objections to the Specification is earnestly solicited.

Rejections under 35 U.S.C. § 112:

Claims 1 through 10 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 1 and 7 have consequently been amended to make them more definite. In particular, the term "capable of" is clearly a property of the compound or composition in the sense of having the ability to bind but not actually being bound at the moment. One will not readily confuse "capable of binding" with "bound to" which defines the location and interaction between the substances. This is clarified further by the amended language in claim 1. Withdrawal of the rejection of claims 1 through 10 is earnestly solicited.

Rejections under 35 U.S.C. § 102:

Claims 1 through 6 and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by Stocker, US 4,560,647. The rejection is traversed to the extent it would apply to the claims as amended.

Amended claim 1 recites, in pertinent part:

"sedimenting particles in a sample across the first slanted solid phase to concentrate the particles."

Stocker neither teaches, discloses, nor suggests sedimenting particles in a sample across the first slanted solid phase to concentrate the particles, as recited in amended claim 1. Stocker, rather, covers the *entire* conical or keel-like bottom region of a Microtiter plate with anti-immunoglobulin, as described at column 1, lines 65 through 68, and column 2, lines 16 through 18. Stocker, therefore, does not concentrate the particles at all before the particles contact the immunoglobulin binding component.

Stocker, in fact, is working with red blood cells in a blood sample and therefore has no motivation to do any concentration at all. Note, e.g. that the "sediment" described in Stocker at column 2, line 1 refers to particles (e.g. red blood cells) that have already passed by the immobilized antibody and do not bind to them. This is quite different from forming a concentrated sediment before contacting and binding to an immobilized antibody, as recited in amended claim 1. Amended claim 1 is thus submitted to be allowable. Withdrawal of the rejection of amended claim 1 is earnestly solicited.

Claims 2 through 6 and 9 depend from amended claim 1 and add further distinguishing elements. Claims 2 through 6 and 9 are thus also submitted to be allowable. Withdrawal of the rejection of claims 2 through 6 and 9 is earnestly solicited.

Claims 1 through 10 were rejected under 35 U.S.C. § 102(e) as being anticipated by Anderson et al., US 6,254,834. The rejection is traversed to the extent it would apply to the claims as amended.

Amended claim 1 recites, in pertinent part:

"sedimenting the particles across a second solid phase where the second solid phase contains at least one immobilized binding agent capable of binding to at least one particle in the sample."

Anderson neither teaches, discloses, nor suggests a second solid phase where the second solid phase contains at least one immobilized binding agent capable of binding to at least one particle in the sample, as recited in amended claim 1. It is submitted respectfully that simply restricting reagents to movement within distinct *zones* in a centrifuge tube is not equivalent to *immobilizing* them, contrary to the assertion in the Office Action. Amended claim 1 is thus submitted to be allowable. Withdrawal of the rejection of amended claim 1 is earnestly solicited.

Claims 2 through 10 depend from amended claim 1 and add further distinguishing elements. Claims 2 through 10 are thus also submitted to be allowable. Withdrawal of the rejection of claims 2 through 10 is earnestly solicited.

Rejections under 35 U.S.C. § 103:

Claims 7 through 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stocker. The rejection is traversed. Reconsideration of the rejection of claims 7 through 9 is requested.

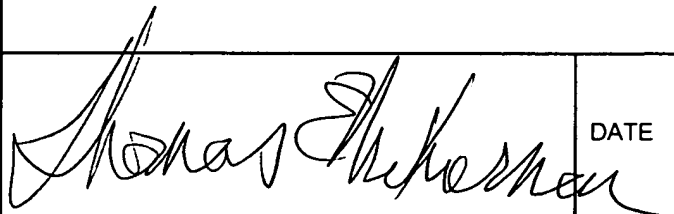
Stocker neither teaches, discloses, nor suggests sedimenting particles in a sample across the first slanted solid phase to concentrate the particles, as discussed above with respect to amended claim 1, nor does he concentrate the particles before the particles

contact the immunoglobulin binding component. Claims 7 through 9 depend from amended claim 1 and add further distinguishing elements. Furthermore, even if Stocker were modified as proposed in the Office Action, the claimed invention would not result. In particular, the apparatus used by Stocker, Microtiter plates, is not modifiable in the manner proposed in the Office Action because the individual wells are so shallow. Also, even if some unforeseen modification could be made to the Microtiter plate, it would be of little benefit because the volume of liquid in individual wells is so small that only high abundance particles could be detected anyway. Claims 7 through 9 are thus also submitted to be allowable. Withdrawal of the rejection of claims 7 through 9 is earnestly solicited.

no need for wells

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all claims 1 through 10 and 19 through 24 are allowable over the prior art. Since the objections to the specification have been addressed and the claims have been amended to overcome the rejections based on 35 U.S.C. § 112, second paragraph, it is submitted that all of claims 1 through 10 and 19 through 24 are now allowable. Allowance of all claims 1 through 10 and 19 through 24 and of this entire application are therefore respectfully requested.

RESPECTFULLY SUBMITTED,			
NAME AND REG. NUMBER	Thomas E. McKiernan, Registration No. 37,889		
SIGNATURE		DATE	September 30, 2002

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Version with markings to show changes made.

[0091] Using so called phage display methodologies, phage particles such as the bacteriophage M13 may be prepared with antigens, antibodies, antibody light or heavy chains, or combination of them attached to coat proteins. See U.S. Patents [5,580,717,] 5,498,530 or 5,580,717. These particles may be used in the present invention as capture agents immobilized on the capture strips described, or, in sandwich assays, as bearers of fluorescent, radioactive, or light absorbing molecules to provide particle detection. Not only whole phage particles, but also suspensions of coat proteins with the insert product attached may be used.

1. (Amended) A method for detecting [the presence of] particles in a sample comprising;

placing a fluid sample into a sedimentation container containing a first slanted solid phase at a location above the first slanted solid phase,

sedimenting particles in a sample across the first slanted solid phase to concentrate the particles;

sedimenting the particles across a second solid phase where the second solid phase contains at least one immobilized binding agent capable of binding to at least one particle in the sample, and

detecting particles bound to the immobilized binding agent on the second solid phase,

wherein the slanted solid phase is slanted with respect to [the] a sedimentation path.

7. (Amended) The method of claim 1 wherein the particles [are] include at least one type of microorganism.